

California

Dairy Review

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California Department of Food and Agriculture
A.G. Kawamura, Secretary

Department Announces Implementation of Hearing Decision

On June 1 and 2, 2006, the Department held a public hearing to consider amendments to the Stabilization and Marketing Plans for Market Milk (Plans).

CDFA stayed its decision pending an Initial Study under CEQA. On October 20, 2006, CDFA posted its response to comments received as a result of that study. The study is complete and the negative declaration adopted. The stay, therefore, expires October 31, 2006 and the amendments will become effective on November 1, 2006.

A review of the amendments to the pricing formulas to take effect November 1, 2006:

- Reduce the f.o.b. California price adjuster for Grade AA butter from \$0.0285 per pound to \$0.0168 per pound.
- Reduce the f.o.b. California price adjuster for Cheddar cheese from \$0.0290 per pound to \$0.0252 per pound.
- Increase the manufacturing cost allowance for Cheddar cheese from \$0.171 per pound to \$0.178 per pound.
- Increase the manufacturing cost allowance for nonfat dry milk from \$0.152 per pound to \$0.160 per pound.
- Increase the manufacturing cost allowance for skim whey powder from \$0.200 per pound to \$0.267 per pound ☀

Production, Prices, Quota Transfers, Alfalfa

September Milk Production

Milk production in California for September 2006 totaled 3.14 billion pounds, up 2.0 percent from September 2005. USDA's estimate for U.S. milk production for September 2006 in the 23 major dairy states is 13.3 billion pounds, up 2.0 percent from September 2005. Production per cow in the 23 major states averaged 1,615 pounds for September 16 pounds more than September 2005. ☀

Minimum Class Prices

Statewide average hundredweight prices

Class	Sept	Oct	Nov
1	\$12.76	\$13.71	\$13.22
2	\$10.69	\$11.45	\$11.45
3	\$10.53	\$11.29	\$11.29
4a	\$10.79	N/A	N/A
4b	\$11.87	N/A	N/A

Federal Order and California Minimum Class 1 Prices

Average Hundredweight Prices

Regions	Sept	Oct	Nov
Phoenix, Arizona	\$13.20	\$14.77	N/A
Southern California	\$12.89	\$13.85	\$13.35
Portland, Oregon	\$12.75	\$14.32	N/A
Northern California	\$12.62	\$13.57	\$13.08
Boston (Northeast)	\$14.10	\$15.67	N/A

Quota Transfer Summary

For September 2006, one dairy producer transferred 456 pounds of SNF quota. September quota sales averaged \$515 per pound of SNF (without cows), average ratio of 2.30. For October 2006, five dairy producers transferred 1,140 pounds of SNF quota. October quota sales averaged \$502 per pound of SNF (without cows), average ratio of 2.42.

Alfalfa Update: October

Northern California: Premium and Supreme alfalfa were steady in a light test with good demand but light supplies. Good alfalfa was steady with moderate demand and moderate to light supplies, but Fair alfalfa not well tested. Retail and Stable hay was steady with moderate demand and moderate supplies. Early October brought light showers slowing down movement and new sales of hay as the season comes to a close.

Southern California: Supreme and Premium alfalfa was not well tested with good demand and no supply available. Fair and Good alfalfa was steady in a very thin test with light demand and moderate supplies. Retail and stable hay was steady with good demand and moderate supplies. ☀

Supreme Hay Prices

Statewide average prices per ton

Area	9/29	10/6	10/13	10/20
Petaluma	\$175-190	\$180-200	N/A	N/A
North Valley ¹	\$170-200	\$175-189	\$172-190	\$180-185
South Valley ²	\$187-192	\$178-198	N/A	\$175-197
Chino Valley	N/A	N/A	N/A	N/A

¹North Valley is Escalon, Modesto and Turlock areas.

²South Valley is Tulare, Visalia and Hanford areas.

Alfalfa Hay Sales/Delivery

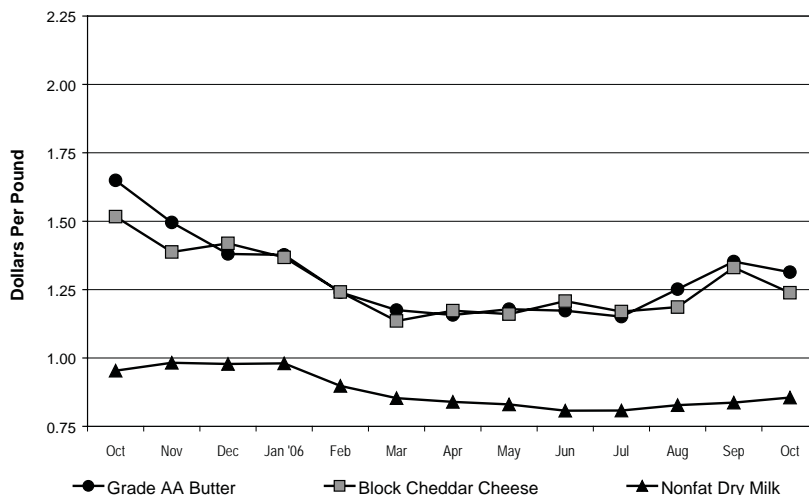
	August	September
Tons Sold ¹	207,837	148,856
Tons Delivered ²	69,735	63,645

¹ For current or future delivery.

² Contracted or current sales.

Alfalfa hay sales, deliveries and Supreme quality prices per ton, delivered to dairies, as reported by the USDA Market News Service, Moses Lake, WA, (509) 765-3611, <http://www.ams.usda.gov/marketnews.htm>

Grade AA Butter, Block Cheddar Cheese, and Nonfat Dry Milk Prices Used in the Calculation of California Class 1 Milk Prices



Southwest Cheese Plant Celebrates Opening

One of the largest cheese and whey processing plants in the world officially opened its doors in Clovis, N.M. Southwest Cheese (SWC), a \$190 million dairy industry joint venture between Glanbia plc and the Great Southwest Agency, is expected to meet the projected goal of \$340 million in sales to both national and international markets, bringing New Mexico to the forefront in the dairy industry.

The 50/50 joint venture between Glanbia plc and the Greater Southwest Agency is the epitome of a perfect dairy industry joint venture between globally competitive dairy farming and world class management, operations and technology. Glanbia is responsible for day-to-day management and operation of the SWC plant and for the sales of all cheese and whey produced. The milk is supplied from the Greater Southwest Agency, coordinating supplies from Dairy Farmers of America, Select Milk Producers, Inc., LoneStar Milk Producers and Zia Milk Producers.

Ground was broken for the 340,000 square foot plant in February of 2004, with the first tankers delivering milk to the plant in October of 2005. At full capacity, Southwest Cheese will process 2.5 billion pounds of milk and 2.3 billion pounds of high value-added whey per year into American style cheeses and valuable proteins for the global nutritional market.

The large scale, automated, state-of-the-art plant allows SWC to produce a high quality product in high volume to meet the needs of the national and growing international markets. Currently SWC is producing at close to full capacity of 250 million pounds of cheese per year. Production from the plant brings Glanbia plc to the position of number one U.S. producer of American style cheddar.

"Clovis is an ideal location for the plant due to the fact that it is right in the center of a strong milk supply area, which naturally will also reduce transport costs for farmers," said Mike McCloskey, Chairman of SWC. "The support of the New Mexico Department of Economic Development and the local development boards has been instrumental in helping to build the SWC plant here on the high plains. SWC continues to work with local educational institutions to ensure that the skills required by SWC are being developed on an on-going basis."

Commenting on progress since start up almost exactly a year ago, SWC President Maurice Keane said, "We are proud that our world scale, state-of-the-art facility

was completed on time and to budget in October 2005, followed by a successful ramp up during 2006. SWC has built a strong team capable of delivering world class performance in an ever changing marketplace."

"Glanbia is pleased with the progress at Southwest Cheese," commented John Moloney, Group Managing Director of Glanbia. "The growth strategy for SWC is to serve the domestic market and also to increase exports. During its first year of operation, in addition to serving the domestic U.S. market, Glanbia has sold SWC cheese and whey into markets in Mexico, Africa, South America, Asia and Europe."

Commenting on the joint venture, Rick Smith Chief Executive Officer of Dairy Farmers of America said, "It's exciting to see this partnership project come to fruition. Not only has the plant created an important new market for milk in the region, but it has met the goal of maximizing market opportunities for the benefit of all the stakeholders."

Southwest Cheese produces 40 and 640 pound blocks of Cheddar, Monterey Jack, Colby and Pepper Jack cheeses along with high quality whey products. The plant is located 9 miles from the Texas border and employs over 200 people.

For now, Southwest Cheese is focusing on meeting its current goals of production, but growth at the plant is a possibility in the future - the company has the capacity to increase production by 20 to 30 percent. Much of the infrastructure needed to do so already exists at the plant and the company already owns more than 2,000 acres of land in southern Curry County so land does not appear to be an issue.

Plant Facts:

7 — Million pounds of milk accepted at the plant every 24 hours

60 — Miles of stainless steel piping above ground

200 — Estimated employees at the plant

742 — Miles of electrical cable above and below ground

3,000 — Pounds of whey protein powder produced per hour

44,000 — Pounds of cheese processed every hour

500,000 — Gallons of water recovered from milk every day, treated and recycled for irrigation



Get more for your cull cows

National Cattlemen's Beef Association press release

By following a few quality assurance management practices, dairy producers can boost their revenue from the sale of their animals for beef. And doing so helps ensure that higher quality beef reaches the meat case.

"The sale of cull cows and bull calves accounts for only four percent of a dairy producer's gross revenue, but that number could increase by at least 2 percent," said Gary Smith, professor of animal science at Colorado State University (CSU). "Dairy producers can capture that extra value by eliminating injection-site lesions in the rump and hindquarters, reducing bruising and adding proper conditioning to cull cows before sending them to market."

Not all meat from dairy cows or dairy steers is processed and sold as ground beef. In fact, nearly 50 percent of dairy beef is merchandised into higher-value whole muscle cuts from the loin, rib, round and "flat" portions of the carcass. When injection-site lesions do occur, it not only costs dairy producers money but it costs meat packers or processors money when they must trim and discard damaged tissue.

The 1999 National Market Cow and Bull Quality Audit, which was partially funded by checkoff investments in the Beef Quality Assurance Program, showed that dairy producers lost about \$70 on every cow that year because of product defects, including lesions and bruising. While injection site lesions do not pose a health threat, they can affect consumer confidence in beef. A simple solution is to follow the Beef Checkoff's Beef Quality Assurance recommendation of administering all injections in the animal's neck instead of hindquarters.

Injection-site lesions in the round are an industry-wide problem for dairy beef. A 2000 CSU study showed that of animals evaluated in the Midwest, 47.5 percent of the dairy cows had lesions found mostly in the lower two quadrants of the hindleg or outside round compared to 32.5 percent of beef cows with lesions found mostly in the upper two quadrants of the hindleg or the sirloin and upper portion of the outside round. "Producers need to be aware that wherever a needle hits the meat, that area will be tough," said Smith.

Smith suggests the following to help reduce injection-site lesions:

- Avoid giving cows injections in the lower hindquarters, shoulder, upper hindquarters or the rump.
- Avoid giving baby calves a shot anywhere in the shoulder, rump or hindquarters.
- Give all injections subcutaneously in the neck.

"Giving a one- to three-day-old calf a shot in the round guarantees a lesion that shows up 12 to 24 months later when that carcass is in the cooler," said Smith. "Quality defects continue to cause substantial losses to higher-value cuts from the round and other areas."

To obtain more revenue when selling cull cows, dairy producers should have an effective monitoring and a comprehensive culling plan in place. Selling the marginal dairy cow before she becomes too thin benefits the dairy producer, the beef packer and the consumer. Smith said feeding cull dairy cows a concentrated diet for 56 days prior to slaughter has tremendous economic benefits, including:

Increases muscling and fat-free lean yields.

- Turns fat color from yellow to white, which is preferred by consumers.
- Improves muscle firmness.
- Increases value by \$60.84 — \$52.58 due to weight gain over feed costs and \$8.26 due to improved ribeye value.

Smith noted that since dairy cows are traditionally fed higher-quality feed, dairy producers' profits for selling properly conditioned cows aren't as high as those seen with British and Continental beef breeds. "However, dairy producers can reap additional income beyond the added costs of feeding by sending properly conditioned cows to market. Overall, following proper beef quality assurance practices is important because dairy producers play an important role in delivering beef that meets consumers' expectations for taste, tenderness and color," said Smith.

USDA Reverses Corn Estimate

Look out for higher corn prices. In a move that both surprised and perplexed market analysts, the USDA dramatically lowered its corn crop estimate in the mid-October "Crop Production" report. The corn crop is now projected to be 10.9 billion bushels — 209 million bushels lower than last month's estimate. Many analysts were expecting an increase in crop size, some as much as 150 million bushels. The USDA also adjusted the projection of corn usage, which brings projected ending stocks below 1 billion bushels. That's about a 30-day supply of corn — also considered the minimum pipeline supply by traders. 🌻

New Law Targets Milk Crate Theft in California

Governor Arnold Schwarzenegger signed AB 2289 into law. The bill is a solution to help California dairymen, milk processors and beverage distributors stem the tide in plastic milk crate and beverage container theft.

"We are very pleased that the Governor signed AB 2289. It demonstrates how important plastic milk crates are to our business," said Amos DeGroot, a dairy processor in Downey, California and sponsor of the bill. "The huge losses that our businesses have faced over the years due to theft of our plastic milk crates and beverage carriers are overwhelming and out-of-control. For example, DeGroot, has spent more than \$1.62 million to replace stolen plastic milk crates during a 12-month period.

AB 2289 is essential for dairy producers to help keep their operating costs down and remain profitable. "Now we have a solution and penalty that will ensure thieves think twice before they take our private property for re-sale to plastic recyclers," he added.

The new law will take effect on January 1, 2007. The new law:

- Makes it a crime for an unauthorized person to possess more than five plastic merchandise shells, milk cases or milk crates.
- Makes it illegal to obliterate the company owner's name on the milk cases and crate, this includes illegal shredding.
- Requires those persons involved in the recycling, shredding or destruction process to obtain a copy of the bill of sale or other evidence of ownership.
- Contains the following penalty: Recycling reprocessors caught shredding plastic milk crates/ plastic carrying cases will be subject to prosecution on misdemeanor charges if the cumulative value is \$400 or less. If the value of property value exceeds \$400 then the crime will be treated as a felony. ☀

Texas regains TB-free status

USDA announced that Texas has regained bovine tuberculosis-free status. The action comes after extensive testing following the 2002 discovery of bovine TB-infected herds. The status change means that cattle producers will no longer need to test cattle for bovine TB prior to movement across state lines. ☀

Mexico Opens Markets to U.S. Dairy Heifers

Agriculture Secretary Mike Johanns announced that Mexico will resume trade in U.S. dairy heifers under 24 months of age. "I am pleased with this first step in reestablishing cattle trade with Mexico, but I remain committed to a broader resumption of cattle trade between our countries," said Johanns. "My goal is to restore the once-vibrant live cattle commerce between the United States and Mexico and to do so in accordance with science-based international guidelines."

Under the agreement announced, U.S. producers will be able to export dairy heifers to Mexico that are under 24 months of age and registered with a purebred dairy breed association or the Dairy Herd Improvement Association, a national dairy producer cooperative. Shipments to Mexico can begin on Oct. 4. The dairy heifers will be individually identified as they depart the United States. Their identification information will be entered into the Mexican animal identification system for purposes of maintaining these animals under bovine spongiform encephalopathy (BSE) surveillance.

Mexico closed its market to U.S. dairy heifers following the December 2003 find of BSE in Washington state. In March 2004, Mexico opened its market to boneless U.S. beef from animals under 30 months of age, and in February 2006, the country opened its market to U.S. bone-in beef from animals under 30 months of age.

In 2003, the United States exported \$ 6.9 million worth of dairy heifers to Mexico. ☀

Mailing List Update

In order to maintain the most up-to-date and cost-effective mailing list for the California Dairy Review Newsletter . . . Please let us know if you are receiving multiple copies of the newsletter or if there is any part of your mailing address that is not correct on the mailing label affixed to the newsletter. You can call the Dairy Marketing Branch at (916) 341-5988; email the branch at dairy@cdfa.ca.gov or email Karen Dapper at kdapper@cdfa.ca.gov and we will update the mailing list with your changes.

Thank You

Alfalfa Hay Trends in California

by Seth Hoyt, USDA NASS, California Field Office

Yields Holding at 6.7 Tons

Alfalfa hay yields in California on October 1 were holding at 6.7 tons per acre according to the latest survey conducted by the National Agricultural Statistics Service (NASS). This compares to 6.9 tons last year and is the lowest yield since 1998.

The December Ag. Survey conducted by NASS should give the most comprehensive look at yields for the year in California. Many hay growers and dairy producers interviewed in late September were saying that alfalfa yields in August were hurt by the July heat. Worm infestations were causing problems in some areas of the central and northern valley. One grower in the central area said he had never seen worms this bad and was having to spray between every cutting.

Low Supplies

The less than expected alfalfa hay supplies in California this fall are starting to firm the market. According to Market News, alfalfa hay prices the week ending October 6 were steady to firm, instances \$5.00 higher on high quality hay. However, prices were still significantly below a year ago and were showing a much different year-to-year trend than some other Western States. Premium and Supreme alfalfa hay delivered to Tulare-Visalia, Hanford, and Bakersfield dairies traded from \$165.00 to \$198.00 per ton. This compares to \$195.00 to \$220.00 per ton delivered the same period last year. Fair quality dry cow alfalfa delivered in the same areas from \$115.00 to \$125.00 compared to \$145.00 to \$147.00 per ton last year, according to Market News. The market on alfalfa hay for feed stores is firming in some areas.

In-shipped Hay

Alfalfa hay shipped into California from other states was down sharply in August and is down ten percent for the January through August period compared to the same time last year. I've stated in previous articles that alfalfa hay shipments from Arizona are running about half the volume they were a year ago. In August, we saw a 37 percent drop in shipments from Utah compared to a year ago. Much of this decline has to do with light supplies of higher testing hay and growers not willing to take the price offered. It was interesting that New Mexico hay buyers were starting to be more active in Utah in recent weeks, according to sources. Alfalfa hay shipments from Nevada in August were only down 4 percent and year-to-date shipments are up 12 percent from 2005, according to CDFA Border Station reports.

Record Highs

According to CDFA's Dairy Marketing Branch, the concentrate fed to milk cows in California in the January thru June period reached nearly 31 pounds per day. This not only includes grains such as corn but also other protein feeds such as canola meal, distillers dried grains (DDG), etc.

From 1990 to 2006, concentrate in milk cow rations has increased from approximately 26 pounds per head per day to nearly 31 pounds. Last year the concentrate in milk cow rations began moving upward, prompted by limited alfalfa hay supplies and record prices, and reasonable corn prices.

The upward trend continued the first half of this year as supplies of higher testing alfalfa hay remained tight and dairies were trying to reduce feed costs. This is also verified by sources who indicate that many dairies have reduced the amount of alfalfa hay in milk cow rations.

During a trip in September, a dairy producer in north central California reported he was not feeding any alfalfa hay to low producing milk cows. But, he was substituting oat hay for alfalfa and using canola meal for the protein source. In addition, his dry cows were receiving oat hay and silage and not being fed any alfalfa hay. Some think this trend of lower alfalfa hay usage will change when milk prices rebound.

Corn Prices on Fire

With feed corn prices making an upward surge in recent weeks the trend of higher amounts of concentrate being fed to milk cows could reverse in the months ahead. As of mid-October, December feed corn prices on the Chicago Board of Trade were \$3.01 per bushel, up from \$2.38 in late August and compared to \$2.02 on October 11, 2005. One factor behind higher corn prices is a recent, revised USDA report that forecasts lower production for 2006.

Bullish prices on wheat and soybeans combined with better than expected corn exports, growing demand for corn for ethanol production and shrinking world grain supplies, including 7 percent lower U.S. corn stocks than a year ago, all resulted in some crazy days in the pits in Chicago. This could benefit alfalfa hay growers in the months ahead. However, milk prices are still unsettled as the cheese markets hit a two month low in mid-October.

Milk Prices Struggling

Class 3 milk futures prices for November dropped

Continued next page

Hay Trends - *Continued*

19 cents on October 11 to reach \$12.10 per hundredweight. When you consider that the July and August Overbase milk prices in California were 63 to 91 cents per cwt. below the closing Class 3 milk futures price for those months, this is not positive for the alfalfa hay industry. November Class 3 milk futures prices were nearing \$13.00 in late August but then reversed course and are now at the lowest point since mid-July.

The reality is that without profitability in the dairy industry, it will not be business as usual for many in the California alfalfa hay industry. ☀

Annual Information & Nomination Meetings

For the California Milk Advisory Board and the California Manufacturing Milk Advisory Board

The California Milk Advisory Board (CMAB) and the California Manufacturing Milk Advisory Board (CMMAB) invite all milk producers to attend one of the annual information and nomination meetings held throughout the state. These meetings will update producers on the advertising and research activities of the CMAB and the CMMAB. Also, nominations for serving on the CMAB and the CMMAB boards of directors will be conducted. Following is a schedule of the meetings. All of these gatherings consist of a no-host reception starting at 6:30 p.m. followed by a 7:30 p.m. dinner.

- Tulare – Wednesday, November 2 - Heritage Complex
- Selma – Wednesday, November 8 - Spike N' Rail
- Modesto – Thursday, November 9 – Ray Simon Criminal Justice Center
- Petaluma – Tuesday, November 14 - Hotel Petaluma
- Fortuna – Wednesday, November 15 - River Lodge
- Willows – Thursday, November 16 – Glenn Golf & Country Club

Please refer to your CMAB mail invitation or call (209) 525-6875 if you need more information ☀

Class 1 Hearing Date Reminders

Hearing Date: December 5, 2006

Hearing Place: Secretary of State Auditorium,
1500 11th Street, Sacramento, 9:00 a.m.

Alternative Proposals: due no later than 4:00 p.m.
on Tuesday, November 14, 2006

Workshop: Tuesday, November 28, 2006 at the
California Department of Food and Agriculture
Auditorium, 1220 N Street, Sacramento
9:00 a.m.

National Dairy Situation and Outlook – USDA Estimates

Milk Production and Cow Numbers

Monthly: Compared to 2005, USDA estimates that overall milk production across the U.S. was up 1.6% in September, led by Texas' 10.5% growth in milk production (on 18,000 more cows and 70 more pounds per cow). California's estimated production was up 2.0% (on 10,000 more cows and 25 more pounds per cow). Among the western states, Arizona was up 1.4%; New Mexico up 4.4%; and Washington was down -3.9%. Two of the top 10 states reported a production decrease.

Quarterly: For the third quarter of 2006 compared to the second quarter of 2006, U.S. milk cow numbers decreased to 9.125 million, production per cow was down 4.3%; the net effect was a 4.5% decrease in milk production to 44.8 billion pounds. USDA projects that for the fourth quarter of 2006 compared to the third quarter of 2006, U.S. milk cow numbers will decrease 10,000 cows to 9.115 million cows, production per cow will be down five pounds per cow; the net effect would be relatively no change in milk production to 44.78 billion pounds.

Milk Prices

Comparing the third quarter of 2006 to the second quarter of 2006, U.S. average milk prices were up to \$12.13/cwt. USDA projects that for the fourth quarter of 2006, U.S. average all-milk prices will be \$13.15-13.35/cwt.; Class 4b prices will be \$11.78-12.18/cwt; and Class 4a prices will be \$11.08-11.58/cwt.

Utility Cow Prices

Comparing the third quarter of 2006 to the second quarter of 2006, average U.S. utility cow prices were up \$1.50/cwt. to a national average of \$49.28/cwt. USDA projects that utility cow prices will average \$48-50 in the fourth quarter of 2006.

Information from the USDA-NASS publication "Milk Production" and the USDA-ERS publication: "Livestock, Dairy, and Poultry Outlook." ☀

PG&E to Buy Natural Gas


PG&E signed an agreement with Microgy, Inc. (Microgy), a subsidiary of Environmental Power Corporation (AMEX: EPG), to deliver renewable natural gas. The agreement involves the purchase of up to 8,000 mcf of pipeline quality renewable natural gas daily. The gas will be generated by Microgy facilities in California.

"It is PG&E's priority to develop new sources of renewable energy," said Fong Wan, vice president of energy procurement, "Delivering clean, climate-friendly energy is important to our customers and the environment, this most recent project is yet another example of our company's commitment to combat climate change." "The state of California is both the largest dairy producer and the largest energy consumer in the United States," said Rich Kessel, President and Chief Executive Officer of Environmental Power. "This agreement is an important step towards developing an important renewable energy source from California's vital agricultural sector."

The agreement will allow PG&E to purchase from Microgy 8,000 mcf of renewable natural gas. Microgy plans to construct four production facilities on the site of large dairy farms in California and interconnect those systems to PG&E's extensive gas pipeline network. In addition to producing renewable energy, each of these facilities can produce significant greenhouse gas benefits.

"Biomethane takes the problem of air pollution and greenhouse gas emissions and turns it into a key part of the solution to California's reliance on fossil fuels," said Allen Dusault, Biofuels Project Director for Sustainable Conservation, an environmental nonprofit organization. "The state has no shortage of dairy manure, and it can now be cost-effectively converted into 'cow power.' That makes good environmental and economic sense."

As Microgy constructs state-of-the-art gas-generating facilities on farms across the central valley, California consumers will benefit from a new source of renewable, environmentally friendly energy.

ABOUT ENVIRONMENTAL POWER CORPORATION: Environmental Power Corporation is a developer, owner and operator of renewable energy production facilities. Its principal operating subsidiary, Microgy, Inc., holds an exclusive license in North America for the development and deployment of a proprietary anaerobic digestion technology. Microgy is a developer of renewable energy facilities for the production and commercial application of methane-rich biogas and its associated environmental attributes from agricultural and food industry wastes. 


Bacteria-Killing Viruses Attack E. Coli

Scientists at Evergreen State College claim they have come up with a way to drastically reduce the chance of E. coli entering the food supply. Evergreen professors Andrew Brabban and Elizabeth Kutter have spent five years testing ways to use bacteria-killing viruses to attack E. coli strains where they live - in the gastrointestinal systems of sheep and cattle. Just as there are viruses that are deadly to humans, some viruses kill bacteria.

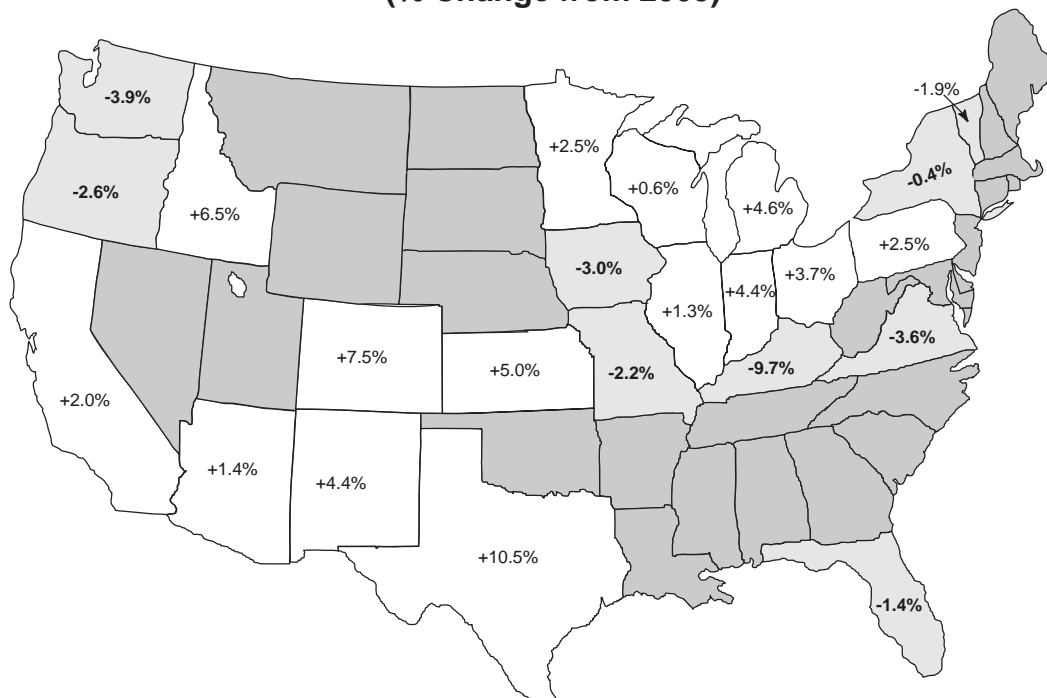
In two peer-reviewed articles published in scientific journals this month, the professors show how using a mixture of bacteria-killing viruses could eliminate almost 100 percent of E. coli without harming the animals. E. coli is a common bacterium that lives in the gastrointestinal systems of most mammals, including humans. Certain strains - such as the 0157:H7 strain found recently in spinach - cause people to get sick and can be deadly.

Brabban and Kutter's research is conducted in partnership with the U.S. Department of Agriculture. If using the bacteria-killing viruses against E. coli gained future approval by the U.S. Food and Drug Administration, it could be used widely in the United States within five years, Brabban said. The viruses could be introduced into animals' feed or drinking water.

The proceeds from any resulting patents would benefit future scientific research at Evergreen and through the U.S. Department of Agriculture.

In August, the FDA approved using viruses that attack another harmful bacterial strain that can cause a serious infection in humans called listeriosis, which can result in death. The virus mixture will be used on ready-to-eat foods, according to the manufacturer, biotechnology company Intralytix. But bacteria-killing viruses - technically known as bacteriophages, or phages for short - aren't a silver bullet, Brabban said. 

September Milk Production in the Top 23 States (% Change from 2005)



For the U.S. overall, comparing September 2006 to September 2005:

- U.S. Milk production during September was up 1.6%
- The number of cows on farms was 9.107 million head, up 40,000 head
- Production per cow averaged 1,591 pounds, 20 pounds more than September 2005
- Nine of the top twenty-three milk producing states showed an decrease in milk production

As reported by USDA
and CDFA (for California)

Milk Production Cost Comparison Summary for California ^{1/} By Quarter, 2006-2007

Quarter	North Coast		North Valley		South Valley		Southern California		Statewide Weighted Average	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
<i>Dollars per Hundredweight</i>										
1st Quarter										
Total Costs	15.35		12.32		11.72		11.76		12.01	
Total Costs & Allowances*	16.93		13.82		13.24		13.07		13.52	
2nd Quarter										
Total Costs	14.22		12.36		12.47		11.99		12.43	
Total Costs & Allowances*	15.76		13.88		14.00		13.31		13.94	
3rd Quarter										
Total Costs										
Total Costs & Allowances*										
4th Quarter										
Total Costs										
Total Costs & Allowances*										

* Includes an allowance for management and a return on investment

Hundredweight Pool Prices

Month	Quota	Overbase
March	\$14.98	\$13.28
April	\$15.06	\$13.36
May	\$14.60	\$12.90
June	\$14.56	\$12.86
July	\$14.99	\$13.29
August	\$14.65	\$12.95
September	\$15.26	\$13.56
October	\$15.07	\$13.37
November	\$14.35	\$12.65
December	\$14.41	\$12.71
January '06	\$13.91	\$12.21
February	\$12.75	\$11.05
March	\$12.19	\$10.49
April	\$11.90	\$10.20
May	\$11.90	\$10.20
June	\$11.90	\$10.20
July	\$11.71	\$10.01
August	\$12.13	\$10.43
September	\$12.80	\$11.10

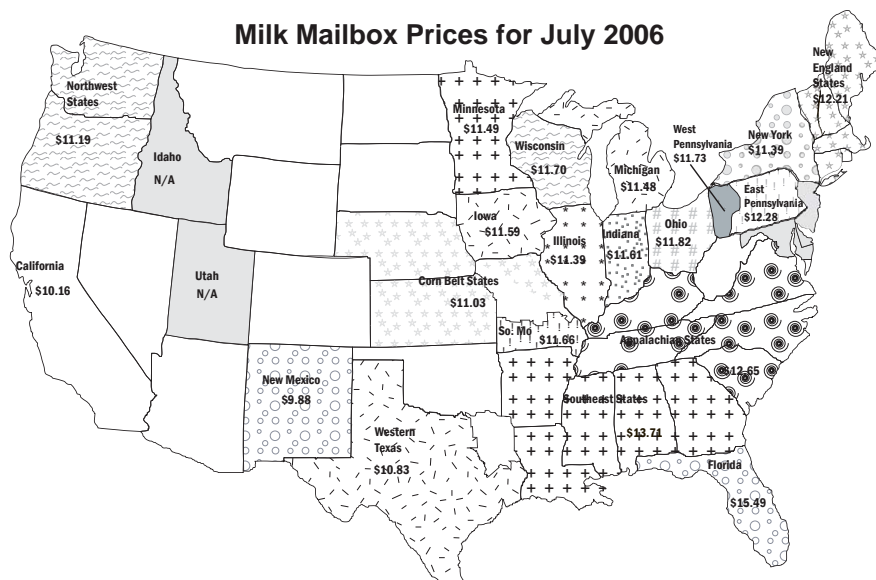
Milk Mailbox Prices

Milk Mailbox Prices in Dollars per Hundredweight

	January	February	March	April	May	June	July
California ¹	\$12.87	\$11.52	\$11.05	\$10.64	\$10.45	\$10.42	\$10.16
USDA ²	\$14.73	\$14.43	\$13.57	\$12.64	\$11.92	\$11.74	\$11.66

¹ California mailbox price calculated by CDFA.

² All federal milk market order weighted average, as calculated by USDA.



In July 2006, mailbox prices for selected reporting areas in Federal milk orders averaged \$11.66 per cwt., \$0.08 less than the figure for the previous month. The component tests of producer milk in July 2006 were: butterfat, 3.56%; protein, 2.94%; and other solids 5.71%. On an individual reporting area basis, mailbox prices decreased in all reporting areas except seven, and ranged from \$15.49 in Florida to \$9.88 in New Mexico. In July 2005, the Federal milk order all-area average mailbox price was \$14.62, \$2.96 higher.

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